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<i>A-Min Yao, Nanjing University of Science and Technology, China; Nicola Anselmi, Paolo Rocca, University of Trento, Italy</i>	
<b>FR-A1.4A.7: A HIGHLY ISOLATED DUAL-POLARIZED LINEAR ARRAY ANTENNA WITH VERY LOW CROSS-POLARIZATION .....</b>	<b>1809</b>
<i>Mirhamed Mirmozafari, Guifu Zhang, University of Oklahoma, United States</i>	
<b>FR-A1.4A.8: ISOFLUX PHASED ARRAY DESIGN FOR CUBESATS .....</b>	<b>1811</b>
<i>Joseph Diener, Robert Jones, Atef Elsherbeni, Colorado School of Mines, United States</i>	
<b>FR-A1.4A.9: A MECHANICALLY ROBUST MODULAR VIVALDI ARRAY PANEL FOR ULTRA-WIDEBAND SENSING APPLICATIONS .....</b>	<b>1813</b>
<i>Jie-Bang Yan, Sivaprasad Gogineni, University of Alabama, United States</i>	
<b>FR-A1.4A.10: A WIDEBAND AND WIDE-ANGLE SCANNING CIRCULARLY POLARIZED ARRAY WITH LOW PROFILE .....</b>	<b>1815</b>
<i>Jie Ren, Shanghai Jiao Tong University, China; Lina Zhang, Shanghai Aerospace Electronic Technology Institute, China; Xianling Liang, Weile Yuan, Shanghai Jiao Tong University, China; Qiaoyuan Qian, Shanghai Aerospace Electronic Technology Institute, China; Junping Geng, Weiren Zhu, Ronghong Jin, Shanghai Jiao Tong University, China</i>	
 <b>FR-A5.2A: ON-CHIP ANTENNAS</b>	
<b>FR-A5.2A.1: INTEGRATED DUAL POLARIZED ON-CHIP ANTENNA FOR MM-WAVE APPLICATIONS .....</b>	<b>1817</b>
<i>Ronny Hahnel, Martin Becker, Bernhard Klein, Dirk Plettemeier, Dresden University of Technology, Germany</i>	
<b>FR-A5.2A.2: 200 GHZ HIGH GAIN AND AREA EFFICIENT ON-CHIP YAGI-UDA ANTENNA IN 28NM FD-SOI CMOS .....</b>	<b>N/A</b>
<i>Ali Basaligheh, Parvaneh Saffari, Rambabu Karumudi, Kambiz Moez, University of Alberta, Canada</i>	
<b>FR-A5.2A.3: FEASIBILITY STUDY OF TRANSMISSION BETWEEN WIRELESS INTERCONNECTS IN MULTICHIP MULTICORE SYSTEMS .....</b>	<b>1821</b>
<i>Rounak Singh Narde, Jayanti Venkataraman, Amlan Ganguly, Rochester Institute of Technology, United States</i>	
<b>FR-A5.2A.4: CHIP REFERENCE ANTENNAS: IMPROVING MILLIMETER-WAVE ON-CHIP ANTENNA MEASUREMENTS .....</b>	<b>1823</b>
<i>Per O. Iversen, Edward Szpindor, MVG-Orbit/FR, Inc, United States; Lars Jacob Foged, Lucia Scialacqua, MVG Italy, Italy</i>	
<b>FR-A5.2A.5: SU-8 DERIVED NOVEL ULTRA COMPACT CARBON ANTENNA USING C-MEMS TECHNOLOGY .....</b>	<b>1825</b>
<i>Bidhan Pramanick, Sergio O. Martinez-Chapa, Tec de Monterrey, Mexico; Marc Madou, Tec de Monterrey; University of California, Mexico; Latheef A Shaik, Chinmoy Saha, Indian Institute of Space Science and Technology, India; Jawad Y Siddiqui, University of Calcutta, India</i>	
 <b>FR-A4.1A: PROPAGATION IN COMPLEX ENVIRONMENTS</b>	
<b>FR-A4.1A.1: ENABLING ACCURATE PROPAGATION MODELING OF COMPLEX TUNNEL GEOMETRIES WITH RAY-TRACING .....</b>	<b>1827</b>
<i>Neeraj Sood, Costas D. Sarris, University of Toronto, Canada</i>	

<b>FR-A4.1A.2: CMWAVE THROUGH VEGETATION: CORRELATION OF PIXELS AND ATTENUATION USING UT AND BAYES INFERENCE</b>	<b>1829</b>
<i>Leonardo Menezes, Alexandre Jose Figueiredo Loureiro, University of Brasilia, Brazil</i>	
<b>FR-A4.1A.3: A DISCRETE SCATTERER TECHNIQUE FOR FOPEN RADAR SCATTERING AND IMAGING CHARACTERIZATION</b>	<b>1831</b>
<i>DaHan Liao, U.S. Army Research Laboratory, United States</i>	
<b>FR-A4.1A.4: MODELING AND ANALYSIS OF BISTATIC SCATTERING FROM FORESTS IN SUPPORT OF SOIL MOISTURE RETRIEVAL</b>	<b>1833</b>
<i>Amir Azemati, Mahta Moghaddam, University of Southern California, United States</i>	
<b>FR-A4.1A.5: CLOSED-FORM MODELS OF PROPAGATION CHARACTERISTICS OF NON-PLANAR CPW</b>	<b>1835</b>
<i>Payal Majumdar, University of Delhi South Campus, United States</i>	
<b>FR-A4.1A.6: A NUMERICAL MODEL FOR INVESTIGATING THE EFFECT OF ROUGH SURFACE PARAMETERS ON RADAR CROSS SECTION STATISTICS</b>	<b>1837</b>
<i>Mustafa Kuzuoglu, Middle East Technical University, Turkey; Ozlem Ozgun, Hacettepe University, Turkey</i>	
<b>FR-A4.1A.7: ANALYSIS OF TRANSMISSION CHARACTERISTICS FOR PERIODIC PERFECT AND REAL METAL APERTURES</b>	<b>1839</b>
<i>Sungjun Yoo, Hosung Choo, Jong-Eon Park, Hongik University, Republic of Korea</i>	
<b>FR-A4.1A.8: 2.4 GHZ RADIO-CHANNEL CHARACTERIZATION OF AN UNDERGROUND MINE USING PATCH ANTENNAS</b>	<b>1841</b>
<i>Lamia Arabi, Mourad Nedil, Nahi Kandil, Mohamedlamine Seddiki, Université du Québec en Abitibi-Témiscamingue, Canada; Moulay Elhassan El Azhari, Larbi Talbi, University of quebec in outaouais, Canada</i>	
<b>FR-A4.1A.9: WAVE STRUCTURE FUNCTION OF ELECTROMAGNETIC WAVES PROPAGATING THROUGH ANISOTROPIC HYPERSONIC TURBULENCE</b>	<b>1843</b>
<i>Jiangting Li, Teng Gong, Lixin Guo, Shaofei Yang, School of Physics and Optoelectronic Engineering, Xidian University, China</i>	
<b>FR-A4.1A.10: EFFECTS OF ATMOSPHERIC TURBULENCE ON MODE PURITY OF ORBITAL ANGULAR MOMENTUM MILLIMETER WAVES</b>	<b>1845</b>
<i>Minjian Cheng, Lixin Guo, Jiangting Li, Songhua Liu, School of Physics and Optoelectronic Engineering, China; Mingjian Cheng, State Key Laboratory of Pulsed Power Laser Technology, China</i>	
 <b>FR-A4.2A: SCATTERING AND DIFFRACTION</b>	
<b>FR-A4.2A.1: AN EFFICIENT HYBRID CEM APPROACH TO MODELING BACKSCATTER OF FOREST CLUTTER</b>	<b>1847</b>
<i>Raghu Raj, Michael Kluskens, Dale Zolnick, S.T. Chun, John Brozena, U.S. Naval Research Laboratory, United States</i>	
<b>FR-A4.2A.2: SCATTERING STUDIES ON SORTED MATERIALS OF HIGH-SPEED RAIL SCENARIO FOR PROPAGATION CHANNEL SIMULATIONS</b>	<b>1849</b>
<i>Guangkai Li, Bo Ai, Longhe Wang, Ke Guan, Danping He, Zhangdui Zhong, Beijing Jiaotong University, China; Li Tian, Jianwu Dou, ZTE corporation, China</i>	
<b>FR-A4.2A.3: IMPROVED MILLIMETER-WAVE RADAR EQUATIONS TO PREDICT BACKSCATTERING IN A SAND-AND-DUST STORM</b>	<b>1851</b>
<i>Mu-Min Chiou, Jean-Fu Kiang, National Taiwan University, Taiwan</i>	
<b>FR-A4.2A.4: LOW-COST GAS SENSORS UTILIZING MM-WAVE RADARS</b>	<b>1853</b>
<i>Shuo Liu, George Shaker, Safieddin Safavi-Naeini, J.Michael Chong, University of Waterloo, Canada</i>	
<b>FR-A4.2A.5: EFFICIENT MEASUREMENT TECHNIQUES ON OTA TEST IN REVERBERATION CHAMBER</b>	<b>1855</b>
<i>Zhihao Tian, Yi Huang, University of Liverpool, United Kingdom; Qian Xu, Nanjing University of Aeronautics and Astronautics, China</i>	

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*Giuseppe Labate, Politecnico di Torino, Italy; Loreto Di Donato, University of Catania, Italy; Ladislau Matekovits, Politecnico di Torino, Italy; Tommaso Isernia, University Mediterranea of Reggio Calabria, Italy*

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*Wen Jie Chen, Mei Song Tong, Tongji University, China*

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*Jiang Wang, Wen Wu, Nanjing University of Science and Technology, China; Zhongxiang Shen, Nanyang Technological University, Singapore*

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*Claes Beckman, KTH Royal Institute of Technology, Sweden; Johan Garcia, Stefan Alfredsson, Anna Brunstrom, Karlstad University, Sweden*

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*Joshua Shehan, Paris McGee, James Carson, AmphenoL Antenna Solutions, United States; Ryan Adams, University of North Carolina at Charlotte, United States*

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*Lijia Zhu, Shanghai University, China; Huan-Sheng Hwang, Intel Corp., United States; Eugene Ren, Mojoose Inc., United States; Guangli Yang, Shanghai University, China*

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*John Sanford, Ubiquiti Networks, United States*

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*A. M. Allam, German University of Cairo, Egypt; Raed Shubair, Khalifa University & MIT, United Arab Emirates; Adham Hemdan, Steven Botros, German University of Cairo, Egypt*

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*Cyril Buey, Philippe Ratajczak, Orange Labs, France; Fabien Ferrero, Leonardo Lizzi, Université Côte d'Azur, CNRS, France; Theoni Magounaki, Florian Kaltenberger, EURECOM, France*

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*Carlo Bencivenni, Andrés Glazunov, Rob Maaskant, Marianna Ivashina, Chalmers University of Technology, Sweden*

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*Gui Chao Huang, Farhan A. Qazi, Magdy F. Iskander, Zhenqing Yun, University of Hawaii at Manoa, United States*

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*Imad Adjali, Benoit Poussot, Shermila Mostarshedi, Jean-Marc Laheurte, Laboratoire ESYCOM - Université Paris-Est, France; Ayichatou Gueye, Florence Nadal, Laboratoire ESYCOM - ESIEE, France*

<b>FR-A1.2A.2: INVESTIGATION OF CHOKE-RING STRUCTURES FOR GROUND-PENETRATING RADAR</b>	<b>1883</b>
<i>David Sawyer, Ashwin K. Iyer, University of Alberta, Canada; A. Peter Annan, Nectaria Diamanti, Sensors &amp; Software Inc., Canada</i>	
<b>FR-A1.2A.3: REDUCTION OF CROSS-POLARIZED BACK LOBE RADIATION IN CIRCULARLY POLARIZED LOOP YAGI ARRAYS</b>	<b>1885</b>
<i>Ryan Chaky, David Kelley, Bucknell University, United States</i>	
<b>FR-A1.2A.4: MUTUAL COUPLING REDUCTION IN TWO ELEMENTS UWB NOTCH ANTENNA SYSTEM</b>	<b>1887</b>
<i>Donya Nazif, Raneem Rabie, October University for Modern Sciences and Arts, Egypt; Mahmoud A. Abdalla, MTC College, Egypt</i>	
<b>FR-A1.2A.5: SELF-CURING DECOUPLING TECHNIQUE FOR TWO INVERTED-F ANTENNAS WORKING IN ADJACENT BANDS</b>	<b>1889</b>
<i>Jiangwei Sui, Ke-Li Wu, The Chinese University of Hong Kong, Hong Kong SAR of China</i>	
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<b>FR-A1.5A.1: FULL DUPLEX ANTENNA SUBSYSTEM FOR HANDHELD RADIOS</b>	<b>1891</b>
<i>Ahmed Abdelrahman, Dejan Filipovic, University of Colorado Boulder, United States</i>	
<b>FR-A1.5A.2: 7.2 TO 1 ULTRA-WIDEBAND DUAL-LINEAR POLARIZED PHASED ARRAY WITH 600 SCANNING</b>	<b>1893</b>
<i>Jingni Zhong, Elias Alwan, John L. Volakis, The Ohio State University, United States</i>	
<b>FR-A1.5A.3: HYBRID-FED MICROSTRIP PATCH ANTENNA FOR MPAR APPLICATION</b>	<b>1895</b>
<i>Hadi Saeidi-Manesh, Guifu Zhang, University of Oklahoma, United States</i>	
<b>FR-A1.5A.4: COMPARISON OF RADIATION PATTERN MODELING METHODS FOR GPS CONTROLLED RECEPTION PATTERN ARRAY</b>	<b>1897</b>
<i>Jeffrey Maloney, Do-Hoon Kwon, Ramakrishna Janaswamy, University of Massachusetts Amherst, United States; Steven Keller, U.S. Army Research Laboratory, United States</i>	
<b>FR-A1.5A.5: ON THE EFFECTS OF PARASITIC HORNS WITHIN TIGHTLY PACKED CONCAVE LINEAR ARRANGEMENTS</b>	<b>1899</b>
<i>Carlos Mulero Hernandez, Maxim Ignatenko, Dejan Filipovic, University of Colorado Boulder, United States</i>	
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<b>FR-A4.3A.1: RAY TRACING SIMULATIONS FOR MILLIMETER WAVE PROPAGATION IN 5G WIRELESS COMMUNICATIONS</b>	<b>1901</b>
<i>An-Yao Hsiao, Chang-Fa Yang, National Taiwan University of Science and Technology, Taiwan; Te-Shun Wang, Yuanpei University of Medical Technology, Taiwan; Ike Lin, former Nearfield Systems Inc, Taiwan; Wen-Jiao Liao, National Taiwan University of Science and Technology, Taiwan</i>	
<b>FR-A4.3A.2: USER ASSOCIATION-BASED INTERFERENCE MANAGEMENT IN ULTRA-DENSE NETWORKS</b>	<b>1903</b>
<i>Zhuoyu Wen, Gang Zhu, Minming Ni, Siyu Lin, Beijing Jiaotong University, China</i>	
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<i>Yichuan Lin, Zhangdui Zhong, Danping He, Ke Guan, Beijing Jiaotong University, China; Dongying Zhang, ZTE Corporation, China</i>	

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*Size Wei, Bo Ai, Danping He, Ke Guan, Longhe Wang, Zhangdui Zhong, State Key Laboratory of Rail Traffic Control and Safety, Beijing Jiaotong University, China*

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*Kunmao Li, Danping He, Ke Guan, Bo Ai, Zhangdui Zhong, Beijing Jiaotong University, China; Li Tian, Jianwu Dou, ZTE Corporation, China*

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*Anuj Y. Modi, Constantine A. Balanis, Craig R. Birtcher, Arizona State University, United States*

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*Wengang Chen, Constantine A. Balanis, Craig R. Birtcher, Arizona State University, United States*

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*Anuj Y. Modi, Constantine A. Balanis, Craig R. Birtcher, Arizona State University, United States*

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*Jingjing Xue, Shuxi Gong, Wen Jiang, Tao Hong, National Key Laboratory of Antennas and Microwave Technology Xidian University; Collaborative Innovation Center of Information Sensing and Understanding at Xidian University, China*

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*Haijian Hou, Junhong Wang, Zheng Li, Beijing Jiaotong University, China*

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*Mao Long, Wen Jiang, Shuxi Gong, Tao Hong, National Key Laboratory of Antennas and Microwave Technology, Xidian University, China*

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*Yongtao Jia, Ying Liu, Xidian University, China*

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*Jinxing Li, Min Zhang, Xidian University, China*

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*Vince Rodriguez, NSI-MI Technologies, United States*

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